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| 09/336,031 | 06/18/1999 | KEVIN CURTIS | 2698/36 | 7183 |

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EXAMINER

COLBERT, ELLA

ART UNIT PAPER NUMBER

2172

DATE MAILED: 12/05/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/336,031

Applicant(s)

CURTIS ET AL.

Examiner

Ella Colbert

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US 6,122,635) Burakoff et al, hereafter Burakoff.

With respect to claim 1, Burakoff teaches, processing a symbol to generate a master symbol (col. 2, lines 4-15), determining a unique parent identifier corresponding to the master symbol (col. 4, lines 15-23), storing the parent identifier and the master symbol in a master symbol database wherein the master symbol is linked to the parent identifier (col. 3, lines 29-34 and col. 4, lines 20-23), and storing at least one information element wherein the at least one information element is linked to the parent identifier (col. 4, lines 1-10 and col. 6, lines 4-14). Burakoff did not explicitly teach, a master symbol database, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a master symbol database in view of Burakoff's teachings of a ticker symbol and a database and to modify in Burakoff because such a modification would allow Burakoff's database to only store master symbols (ticker symbols) instead of storing the master symbols with the securities information and other data.

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With respect claim 2, processing the symbol to generate the master symbol includes the step of applying a set of character rules to the symbol in col. 7, lines 41-50).

With respect to claim 3, processing the symbol to generate the master symbol includes the step of applying a set of process rules to the symbol in col. 3, lines 2-13.

With respect to claim 4, the at least one information element is a document (col. 3, lines 38-51).

With respect to claim 14, this dependent claim is rejected for the similar rationale given for claim 3.

With respect to claim 15, this dependent claim is rejected for the similar rationale given for claim 4.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5-11, 16-22, and 30-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burakoff in view of (US 5,940,843) Zucknovich et al, hereafter Zucknovich.

With respect to claim 5, Burakoff did not teach, each master symbol is structured according to a symbol template containing at least one symbol field. Zucknovich teaches, each master symbol is structured according to a symbol template containing at least one symbol field in

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col. 14, lines 23-66 and col. 15, lines 1-5. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have each master symbol structured according to a symbol template containing at least one symbol field and to combine Burakoff's processing a symbol with Zucknovich's each master symbol structured according to a symbol template containing at least one symbol field because such a modification in Burakoff would allow Burakoff to have preset templates for a user or a group of users from a particular company or geographic area and to have the template file opened for the characters to be inserted into the template. Templates are well known in the art for the purpose of being a predesigned document that contains formatting and in many cases, generic text.

With respect to claim 6, Burakoff did not teach, each master symbol includes a symbol segment corresponding to a symbol field defined by the symbol template. Zucknovich teaches, each master symbol includes at least one symbol segment corresponding respectively to the at least symbol field defined by the symbol template in col. 15, lines 8-45. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have each master symbol include a symbol segment corresponding to a symbol field defined by the symbol template and to combine Burakoff's master symbol with Zucknovich's each master symbol includes a symbol segment corresponding to a symbol field defined by the symbol template because such a modification in Burakoff would allow Burakoff's system to have a field for at least one ticker symbol defined in a symbol template. Templates are well known in the art for the

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purpose of being a predesigned document that contains formatting and in many cases, generic text.

With respect to claim 7, Burakoff teaches, each master symbol refers to a security issued by a company in col. 7, lines 35-40. Zucknovich teaches, each master symbol refers to a security issued by a company in col.2, lines 55-61. Together Burakoff and Zucknovich teach the claim limitations of claim 7.

With respect to claim 8, Burakoff did not teach, the symbol template includes a root symbol field referring to the name of a security and a source symbol field referring to a country in which the security is traded. Zucknovich teaches, the symbol template includes a root symbol field referring to the name of a security and a source symbol field referring to a country in which the security is traded in col. 10, lines 33-65. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the symbol template include a root symbol field referring to the name of a security and a source symbol field referring to a country in which the security is traded and to combine Burakoff's process rules to the symbol with Zucknovich's the symbol template include a root symbol field referring to the name of a security and a source symbol field referring to a country in which the security is traded because such a modification in Burakoff would allow Burakoff's system to have a primary field for the name of the security and another field for the country. The root is known in the art as being the main or uppermost level in a hierarchically organized set of information. The root is known as the point

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from which subsets (in this case source symbol fields) branch in a logical sequence that moves from a broader focus to narrower perspectives.

With respect to claim 9, Burakoff teaches, the step of storing at least one information element includes the steps of generating an information element identifier, storing the information element identifier and the parent identifier so that the parent identifier is linked to the information element identifier, and storing the information element and the information element identifier so that the information element identifier is linked to the information element in col. 3, lines 29-37 and lines 52-65, col. 4, lines 1-10, and col. 8, lines 43-47. Zucknovich teaches, the step of storing at least one information element includes the steps of generating an information element identifier, storing the information element identifier and the parent identifier so that the parent identifier is linked to the information element identifier, and storing the information element and the information element identifier so that the information element identifier is linked to the information element in col.15, lines 31-45 and col. 22, lines 57-67. Together Burakoff and Zucknovich teach the claim limitations of claim 9.

With respect to claim 10, Burakoff teaches, each symbol segment comprises an ASCII (American Standard Code for Information Interchange) string in col. 9, lines 30-40. Zucknovich teaches, each symbol segment comprises an ASCII (American Standard Code for Information Interchange) string in col. 7, lines 16-25. Together Burakoff and Zucknovich teach the claim limitations of claim 10.

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With respect to claim 11, Burakoff did not teach, the parent identifier is linked to the information element identifier in a relational database. Zucknovich teaches, the parent identifier is linked to the information element identifier in a relational database in col. 7, lines 5-15. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the parent identifier linked to the information element identifier in a relational database and to combine Burakoff's master symbol linked to the parent identifier with Zucknovich's parent identifier linked to the information element identifier in a relational database because such a modification in Burakoff would allow Burakoff's system to have a relational database that allows field searching. Relational databases are well known in the database art as being a database that stores information in tables - rows and columns of data - and conducts searches using data in specified columns of one table to find additional data in another table. In a relational database, the rows of a table represent records (collections of information about separate items) and the columns represent fields (particular attributes of a record).

With respect to claim 16, this dependent claim is rejected for the similar rationale given for claim 5.

With respect to claim 17, this dependent claim is rejected for the similar rationale given for claim 6.

With respect to claim 18, this dependent claim is rejected for the similar rationale given for claim 7.

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With respect to claim 19, this dependent claim is rejected for the similar rationale given for claim 8.

With respect to claim 20, this dependent claim is rejected for the similar rationale given for claim 9.

With respect to claim 21, this dependent claim is rejected for the similar rationale given for claim 10.

With respect to claim 22, this dependent claim is rejected for the similar rationale given for claim 11.

With respect to claim 30, this dependent claim is rejected for the similar rationale given for claim 16.

With respect to claim 31, this dependent claim is rejected for the similar rationale given for claims 16 and 30.

With respect to claim 32, this dependent claim is rejected for the similar rationale as given for claim 17.

With respect to claim 33, this dependent claim is rejected for the similar rationale as given for claim 18.

With respect to claim 34, this dependent claim is rejected for the similar rationale as given for claim 19.

With respect to claim 35, this dependent claim is rejected for the similar rationale as given for claim 21.

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With respect to claim 36, this dependent claim is rejected for the similar rationale as given for claim 22.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 12, 13, 23-29, and 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US 6,122,635) Burakoff et al, hereafter Burakoff in view of (US 6,236,980 B1) Reese.

With respect to claim 12, Burakoff teaches, receiving an information element and at least an input symbol in col. 7, lines 5-15. Reese teaches, receiving an information element and at least an input symbol in col. 13, lines 34-55. Burakoff did not explicitly teach, processing the input symbol to generate a normalized symbol or searching a master symbol database using a normalized symbol to find a matching master symbol and linked parent identifier in col. 3, lines 18-21 and col. 2, lines 10-15. Reese teaches, processing the input symbol to generate a normalized symbol in col. 14, lines 22-34, searching a master symbol database using a normalized symbol to find a matching master symbol and linked parent identifier in col. 16, lines 20-34 and col. 17, lines 45-50. Burakoff teaches, storing at least the parent identifier and the information element so that the parent identifier is linked to the information element in col. 4, lines 52-65.

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Reese teaches, storing at least the parent identifier and the information element so that the parent identifier is linked to the information element in col.17, lines 51-67 and col. 18, lines 1-4. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a normalized symbol and to use the normalized symbol to find the matching master symbol and to combine Burakoff's processing the symbol and storing a parent identifier with Reese's normalized symbol and using the normalized symbol to find the matching master symbol because such a modification in Burakoff would allow a user to enter the ticker symbol with the parent ID being the association found within the database.

With respect to claim 13, Burakoff teaches, processing the input symbol to generate the normalized symbol includes applying a set of character rules to the input symbol in col. col. 7, lines 41-50. Burakoff did not explicitly teach a normalized symbol. Reese teaches, a normalized symbol in col. 14, lines 22-34, col. 16, lines 20-34, and col. 17, lines 45-50. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a normalized symbol and to use the normalized symbol to find the matching master symbol and to combine Burakoff's processing the symbol and storing a parent identifier with Reese's normalized symbol and using the normalized symbol to find the matching master symbol because such a modification in Burakoff would allow a user to enter the ticker symbol with the parent ID being the association found within the database.

With respect to claim 23, Burakoff did not explicitly teach, if the normalized symbol contains an unresolved segment, searching a contributor database to find a predominant use

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segment and assigning the predominant use segment to the unresolved segment. Reese teaches, if the normalized symbol contains an unresolved segment, searching a contributor database to find a predominant use segment and assigning the predominant use segment to the unresolved segment in col. 26, lines 14-24, fig. 10C(220) and col. 19, lines 3-17. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a normalized symbol contain an unresolved segment searching a contributor database to find a predominant use segment and to assign the predominant use segment to the unresolved segment and to combine Burakoff's input symbol and parent identifier with Reese's normalized symbol containing an unresolved segment, searching a contributor database to find a predominant use segment and assigning the predominant use segment to the unresolved segment because such a modification in Burakoff would allow a user to enter the ticker symbol with the parent ID being the association found within the database and to search for another symbol/abbreviation in the database.

With respect to claim 24, Burakoff did not teach, if the normalized symbol is not found in the master symbol database, searching a database using the input symbol and retrieving a parent identifier linked to the input symbol. Reese teaches, if the normalized symbol is not found in the master symbol database, searching a database using the input symbol and retrieving a parent identifier linked to the input symbol in col. 14, lines 22-34, col. 16, lines 20-34, col. 17, lines 45-50, and col. 39, lines 23-42. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a normalized symbol not found in the master symbol database to search a database using the input symbol and retrieving a parent identifier linked to

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the input symbol and to combine Burakoff's input symbol with Reese's normalized symbol not found in the master symbol database to search a database using the input symbol and retrieving a parent identifier linked to the input symbol because such a modification in Burakoff would allow Burakoff's system to enter a ticker symbol (an input symbol) and to use the association found within the database to search for the parent identifier symbol.

With respect to claim 25, Burakoff teaches, receiving an input symbol in col. 7, lines 51-57. Burakoff did not teach, processing the input symbol to generate a normalized symbol and searching a master symbol database using the normalized symbol to find a matching master symbol and a parent identifier linked to the master symbol. Reese teaches, processing the input symbol to generate a normalized symbol and searching a master symbol database using the normalized symbol to find a matching master symbol and a parent identifier linked to the master symbol in col. 14, lines 22-34, col. 16, lines 20-34, col. 17, lines 45-50. Burakoff teaches, searching an information element database to find an information element linked with the parent identifier and retrieving the information element linked to the parent identifier in col. 3, lines 29-30 and lines 39-45, col. 4, lines 15-19, and col. 10, lines 19-51. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a normalized symbol and to use the normalized symbol to find the matching master symbol and to combine Burakoff's processing the symbol and storing a parent identifier with Reese's normalized symbol and using the normalized symbol to find the matching master symbol because such a modification

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in Burakoff would allow a user to enter the ticker symbol with the parent ID being the association found within the database. This claim is also rejected for the similar rationale given for claim 12.

With respect to claim 26, Burakoff did not teach, determining whether the input symbol includes an unresolved segment and if the input symbol contains an unresolved segment, searching a client database to find a client preference segment, and assigning the client preference segment to the unresolved segment. Reese teaches, determining whether the input symbol includes an unresolved segment and if the input symbol contains an unresolved segment, searching a client database to find a client preference segment, and assigning the client preference segment to the unresolved segment in col. 19, lines 3-17 and col. 26, lines 14-24. It would have been obvious to one having ordinary skill in the art at the time the invention was made to determine whether the input symbol includes an unresolved segment and if the input symbol contains an unresolved segment, searching a client database to find a client preference segment, and assigning the client preference segment to the unresolved segment and to combine Burakoff's receiving an input symbol and searching a database with Reese's determining whether the input symbol includes an unresolved segment and if the input symbol contains an unresolved segment, searching a client database to find a client preference segment, and assigning the client preference segment to the unresolved segment because such a modification in Burakoff would allow a user to enter the ticker symbol (an input symbol) and to find an association within the database to find the user's preferred symbol. This claim is also rejected for the similar rationale given for claim 25.

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With respect to claim 27, this dependent claim is rejected for the similar rationale given for claim 13.

With respect to claim 28, Burakoff teaches, processing the input symbol to generate a normalized symbol comprises applying a set of process rules in col. 3, lines 2-13.

This dependent claim is also rejected for the similar rationale given for claim 13.

With respect to claim 29, Burakoff teaches, the information element is a document.

With respect to claim 37, Burakoff teaches, a storage device in col. 5, 36-39, a network interface in col. 5, lines 40-42, a processor in col. 5, lines 29-30 coupled to the storage device in col. 5, lines 36-39, the processor adapted to: store a database of master symbols, wherein each master symbol is linked to a parent identifier and a document database in col. 6, lines 10-13. This independent claim is also rejected for the similar rationale given for claims 12 and 25.

With respect to claim 38, this dependent claim is rejected for the similar rationale given for claims 23 and 26.

With respect to claim 39, Burakoff teaches, a storage device in col. 5, lines 36-39 storing a master symbol database and a document database in col. 6, lines 10-13, the master symbol database storing master symbols, wherein each master symbol is linked to a parent identifier in col. 4, lines 20-23, and the document database storing documents linked to a parent identifier a network interface in col. 5, lines 40-42, a processor in col. 5, lines 29-30, which: receives an input symbol via the network interface in col. 7, lines 51-67, Reese teaches, processes the input symbol to obtain a normalized input symbol in col. 14, lines 22-34 and searches the symbol

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database using the normalized input symbol to find a matching master symbol and a linked parent identifier in col. 16, lines 20-34 and col. 17, lines 45-50. Burakoff teaches, retrieves documents from the document database that are linked to the parent identifier in col. 4, lines 52-65 and col. 6, lines 10-13. This independent claim is rejected for the similar rationale given for claim 37.

With respect to claim 40, this dependent claim is rejected for the similar rationale as given for claims 26 and 38.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Madnick et al (US 6,282,537) teaches a database with lookup tables and ticker companies.

Belzberg (US 6,134,535) teaches a computerized stock exchange with tick/ticker symbols.

Kitain et al (US 5,864,871) a list of ticker symbols that a contributor listed as relevant (col. 26, lines 46-47) and data fields

Inquires

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ella Colbert whose telephone number is (703)308-7064. The examiner can normally be reached Monday through Thursday from 6:30 a.m. to 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu, can be reached on (703)305-4393.

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Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or faxed to:

(703)746-7238 or (703)746-7239, (for formal communications intended
for entry).


Or:

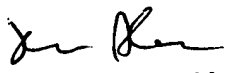
(703)746-7240 (for informal or draft communications, please label

"PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal
Drive, Arlington, Virginia., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the Group Receptionist whose telephone number is (703)308-9600.


E. Colbert
December 1, 2001


HOSAIN T. ALAM
PRIMARY EXAMINER